












2030 With Project - PM Peak Hour
163: Pacific View & Beach

Synchro 6 Report























						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1770	5085	4955	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1770	1583	1770	5085	4955	
Volume (vph)	200	50	140	1018	536	110
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	200	50	140	1018	536	110
RTOR Reduction (vph)	0	40	0	0	21	0
Lane Group Flow (vph)	200	10	140	1018	625	0
Turn Type		Perm	Prot			
Protected Phases	4		5	2	6	
Permitted Phases		4				
Actuated Green, G (s)	10.0	10.0	6.4	32.1	21.7	
Effective Green, g (s)	10.0	10.0	6.4	32.1	21.7	
Actuated g/C Ratio	0.20	0.20	0.13	0.64	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	353	316	226	3258	2146	
v/s Ratio Prot	c0.11		c0.08	c0.20	0.13	
v/s Ratio Perm		0.01				
v/c Ratio	0.57	0.03	0.62	0.31	0.29	
Uniform Delay, d1	18.1	16.1	20.7	4.0	9.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	0.0	5.0	0.1	0.1	
Delay (s)	20.2	16.2	25.7	4.1	9.3	
Level of Service	C	B	C	A	A	
Approach Delay (s)	19.4			6.7	9.3	
Approach LOS	B			A	A	
Intersection Summary						
HCM Average Control Delay			9.1	HCM Level of Service		A
HCM Volume to Capacity ratio			0.41			
Actuated Cycle Length (s)			50.1	Sum of lost time (s)		8.0
Intersection Capacity Utilization			41.6%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

**YEAR (2030) WITH PROJECT WITH
ALTERNATIVE 1 CONDITIONS
(HCM METHODOLOGY)**

2030 Alternative 1 With Project - AM Peak Hour

39: Pacific Coast Hwy & Warner

Synchro 6 Report

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3526		1770	3539	1583	1770	1826		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3526		1770	3539	1583	1770	1826		3433	1863	2787
Volume (vph)	560	1509	40	30	1278	266	20	200	30	306	50	770
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	560	1509	40	30	1278	266	20	200	30	306	50	770
RTOR Reduction (vph)	0	1	0	0	0	83	0	4	0	0	0	425
Lane Group Flow (vph)	560	1548	0	30	1278	183	20	226	0	306	50	345
Turn Type	Prot			Prot		Perm	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	20.9	63.1		3.3	45.5	45.5	1.5	19.8		12.4	30.7	30.7
Effective Green, g (s)	20.9	63.1		3.3	45.5	45.5	1.5	19.8		12.4	30.7	30.7
Actuated g/C Ratio	0.18	0.55		0.03	0.40	0.40	0.01	0.17		0.11	0.27	0.27
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	626	1941		51	1405	629	23	315		371	499	747
v/s Ratio Prot	c0.16	0.44		0.02	c0.36		0.01	c0.12		c0.09	0.03	
v/s Ratio Perm						0.12						0.12
v/c Ratio	0.89	0.80		0.59	0.91	0.29	0.87	0.72		0.82	0.10	0.46
Uniform Delay, d1	45.8	20.6		55.0	32.6	23.5	56.5	44.8		50.0	31.6	35.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	15.2	2.4		16.1	8.9	0.3	127.6	7.6		13.8	0.1	0.5
Delay (s)	61.0	23.0		71.1	41.5	23.8	184.0	52.3		63.9	31.6	35.5
Level of Service	E	C		E	D	C	F	D		E	C	D
Approach Delay (s)		33.1			39.1			62.9			43.0	
Approach LOS		C			D			E			D	












Intersection Summary

HCM Average Control Delay	38.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	114.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

2030 Alternative 1 With Project - AM Peak Hour

125: Pacific Coast Hwy & Seapoint













Synchro 6 Report

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		0.97	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3519		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	3539	3519		3433	1583
Volume (vph)	150	1505	1153	46	96	350
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	150	1505	1153	46	96	350
RTOR Reduction (vph)	0	0	3	0	0	30
Lane Group Flow (vph)	150	1505	1196	0	96	320
Turn Type	Prot				pm+ov	
Protected Phases	7	4	8		6	7
Permitted Phases						6
Actuated Green, G (s)	11.0	41.2	26.2		7.5	18.5
Effective Green, g (s)	11.0	41.2	26.2		7.5	18.5
Actuated g/C Ratio	0.19	0.73	0.46		0.13	0.33
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	343	2572	1626		454	628
v/s Ratio Prot	0.08	c0.43	c0.34		0.03	c0.10
v/s Ratio Perm						0.10
v/c Ratio	0.44	0.59	0.74		0.21	0.51
Uniform Delay, d1	20.1	3.7	12.4		22.0	15.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.9	0.3	1.8		0.2	0.7
Delay (s)	21.0	4.0	14.2		22.2	16.1
Level of Service	C	A	B		C	B
Approach Delay (s)		5.6	14.2		17.4	
Approach LOS		A	B		B	
Intersection Summary						
HCM Average Control Delay			10.3		HCM Level of Service	B
HCM Volume to Capacity ratio			0.70			
Actuated Cycle Length (s)			56.7		Sum of lost time (s)	12.0
Intersection Capacity Utilization			61.7%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - AM Peak Hour

126: Pacific Coast Hwy & Goldenwest













Synchro 6 Report

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	1770	1583
Volume (vph)	190	1441	1168	189	329	290
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	190	1441	1168	189	329	290
RTOR Reduction (vph)	0	0	0	98	0	214
Lane Group Flow (vph)	190	1441	1168	91	329	76
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	11.0	49.2	34.2	34.2	20.2	20.2
Effective Green, g (s)	11.0	49.2	34.2	34.2	20.2	20.2
Actuated g/C Ratio	0.14	0.64	0.44	0.44	0.26	0.26
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	252	2250	1564	699	462	413
v/s Ratio Prot	c0.11	0.41	c0.33		c0.19	
v/s Ratio Perm				0.06		0.05
v/c Ratio	0.75	0.64	0.75	0.13	0.71	0.18
Uniform Delay, d1	31.9	8.7	18.0	12.8	26.0	22.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.0	0.6	2.0	0.1	5.1	0.2
Delay (s)	43.9	9.3	20.0	12.9	31.1	22.4
Level of Service	D	A	B	B	C	C
Approach Delay (s)		13.3	19.0		27.0	
Approach LOS		B	B		C	
Intersection Summary						
HCM Average Control Delay			17.8		HCM Level of Service	B
HCM Volume to Capacity ratio			0.74			
Actuated Cycle Length (s)			77.4		Sum of lost time (s)	12.0
Intersection Capacity Utilization			71.0%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - AM Peak Hour

127: Pacific Coast Hwy & 17th St













Synchro 6 Report

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	1770	1583
Volume (vph)	80	1631	1338	30	90	90
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	80	1631	1338	30	90	90
RTOR Reduction (vph)	0	0	0	14	0	76
Lane Group Flow (vph)	80	1631	1338	16	90	14
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	4.7	38.4	29.7	29.7	8.9	8.9
Effective Green, g (s)	4.7	38.4	29.7	29.7	8.9	8.9
Actuated g/C Ratio	0.08	0.69	0.54	0.54	0.16	0.16
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	150	2457	1901	850	285	255
v/s Ratio Prot	0.05	c0.46	0.38		c0.05	
v/s Ratio Perm				0.01		0.01
v/c Ratio	0.53	0.66	0.70	0.02	0.32	0.06
Uniform Delay, d1	24.2	4.8	9.5	6.0	20.5	19.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.6	0.7	1.2	0.0	0.6	0.1
Delay (s)	27.9	5.5	10.7	6.0	21.1	19.7
Level of Service	C	A	B	A	C	B
Approach Delay (s)		6.5	10.6		20.4	
Approach LOS		A	B		C	
Intersection Summary						
HCM Average Control Delay			9.0	HCM Level of Service		A
HCM Volume to Capacity ratio			0.60			
Actuated Cycle Length (s)			55.3	Sum of lost time (s)		8.0
Intersection Capacity Utilization			56.7%	ICU Level of Service		B
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - AM Peak Hour

165: Pacific Coast Hwy & 9th St




















Synchro 6 Report

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	1770	1583
Volume (vph)	20	1671	1434	10	40	20
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	1671	1434	10	40	20
RTOR Reduction (vph)	0	0	0	4	0	17
Lane Group Flow (vph)	20	1671	1434	6	40	3
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	1.0	33.6	28.6	28.6	7.1	7.1
Effective Green, g (s)	1.0	33.6	28.6	28.6	7.1	7.1
Actuated g/C Ratio	0.02	0.69	0.59	0.59	0.15	0.15
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	36	2442	2078	930	258	231
v/s Ratio Prot	0.01	c0.47	0.41		c0.02	
v/s Ratio Perm				0.00		0.00
v/c Ratio	0.56	0.68	0.69	0.01	0.16	0.01
Uniform Delay, d1	23.6	4.4	7.0	4.2	18.2	17.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.3	0.8	1.0	0.0	0.3	0.0
Delay (s)	40.9	5.2	8.0	4.2	18.5	17.8
Level of Service	D	A	A	A	B	B
Approach Delay (s)		5.7	8.0		18.2	
Approach LOS		A	A		B	
Intersection Summary						
HCM Average Control Delay			6.9		HCM Level of Service	A
HCM Volume to Capacity ratio			0.59			
Actuated Cycle Length (s)			48.7		Sum of lost time (s)	8.0
Intersection Capacity Utilization			56.2%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - AM Peak Hour

129: Pacific Coast Hwy & 6th St















Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.96		1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5072		1770	5060			1740		1770	1632	
Flt Permitted	0.95	1.00		0.95	1.00			0.46		0.66	1.00	
Satd. Flow (perm)	1770	5072		1770	5060			821		1222	1632	
Volume (vph)	118	1639	30	30	1177	41	40	20	30	50	30	142
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	118	1639	30	30	1177	41	40	20	30	50	30	142
RTOR Reduction (vph)	0	2	0	0	3	0	0	16	0	0	126	0
Lane Group Flow (vph)	118	1667	0	30	1215	0	0	74	0	50	46	0
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)	9.6	40.9		3.7	35.0			11.3		11.3	11.3	
Effective Green, g (s)	9.6	40.9		3.7	35.0			11.3		11.3	11.3	
Actuated g/C Ratio	0.10	0.41		0.04	0.35			0.11		0.11	0.11	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	172	2095		66	1789			94		139	186	
v/s Ratio Prot	c0.07	c0.33		0.02	0.24						0.03	
v/s Ratio Perm								c0.09		0.04		
v/c Ratio	0.69	0.80		0.45	0.68			0.79		0.36	0.25	
Uniform Delay, d1	43.2	25.4		46.7	27.2			42.7		40.5	40.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	10.8	2.2		4.9	1.0			34.1		1.6	0.7	
Delay (s)	54.0	27.6		51.6	28.3			76.8		42.1	40.7	
Level of Service	D	C		D	C			E		D	D	
Approach Delay (s)		29.3			28.8			76.8			41.0	
Approach LOS		C			C			E			D	
Intersection Summary												
HCM Average Control Delay			31.2			HCM Level of Service				C		
HCM Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			99.0			Sum of lost time (s)				39.1		
Intersection Capacity Utilization			64.4%			ICU Level of Service				C		
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - AM Peak Hour

130: Pacific Coast Hwy & Main























Synchro 6 Report

							
Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0			
Lane Util. Factor		0.91	1.00	0.91			
Frt		1.00	1.00	1.00			
Flt Protected		1.00	0.95	1.00			
Satd. Flow (prot)		5085	1770	5085			
Flt Permitted		1.00	0.95	1.00			
Satd. Flow (perm)		5085	1770	5085			
Volume (vph)	0	1640	10	1290	0	0	0
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1640	10	1290	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1640	10	1290	0	0	0
Turn Type	Prot		Prot		Perm		Perm
Protected Phases	7	4	3	8		6	
Permitted Phases					8		6
Actuated Green, G (s)		34.2	1.1	39.3			
Effective Green, g (s)		34.2	1.1	39.3			
Actuated g/C Ratio		0.41	0.01	0.47			
Clearance Time (s)		4.0	4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0			
Lane Grp Cap (vph)		2083	23	2393			
v/s Ratio Prot		c0.32	0.01	c0.25			
v/s Ratio Perm							
v/c Ratio		0.79	0.43	0.54			
Uniform Delay, d1		21.5	40.9	15.7			
Progression Factor		1.00	1.00	1.00			
Incremental Delay, d2		2.0	12.6	0.2			
Delay (s)		23.5	53.5	15.9			
Level of Service		C	D	B			
Approach Delay (s)		23.5		16.2		0.0	
Approach LOS		C		B		A	
Intersection Summary							
HCM Average Control Delay			20.3		HCM Level of Service		C
HCM Volume to Capacity ratio			0.80				
Actuated Cycle Length (s)			83.5		Sum of lost time (s)		48.2
Intersection Capacity Utilization			35.0%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

2030 Alternative 1 With Project - AM Peak Hour

133: Pacific Coast Hwy & 1st St























Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.95	1.00	0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.97	1.00
Satd. Flow (prot)	1770	5050		1770	4890		1681	1753	1583	1681	1716	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.97	1.00
Satd. Flow (perm)	1770	5050		1770	4890		1681	1753	1583	1681	1716	2787
Volume (vph)	170	1442	70	40	865	298	70	50	20	329	80	500
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	170	1442	70	40	865	298	70	50	20	329	80	500
RTOR Reduction (vph)	0	4	0	0	50	0	0	0	18	0	0	426
Lane Group Flow (vph)	170	1508	0	40	1113	0	58	62	2	199	210	74
Turn Type	Prot			Prot			Split		Perm	Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	12.0	37.7		3.2	28.9		9.3	9.3	9.3	15.7	15.7	15.7
Effective Green, g (s)	12.0	37.7		3.2	28.9		9.3	9.3	9.3	15.7	15.7	15.7
Actuated g/C Ratio	0.11	0.34		0.03	0.26		0.08	0.08	0.08	0.14	0.14	0.14
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	190	1701		51	1263		140	146	132	236	241	391
v/s Ratio Prot	c0.10	c0.30		0.02	0.23		0.03	c0.04		0.12	c0.12	
v/s Ratio Perm									0.00			0.03
v/c Ratio	0.89	0.89		0.78	0.88		0.41	0.42	0.01	0.84	0.87	0.19
Uniform Delay, d1	49.3	35.1		54.0	39.9		48.7	48.8	47.1	46.9	47.1	42.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	37.2	6.0		53.8	7.5		2.0	2.0	0.0	23.0	27.2	0.2
Delay (s)	86.5	41.1		107.8	47.4		50.7	50.7	47.1	69.9	74.4	42.7
Level of Service	F	D		F	D		D	D	D	E	E	D
Approach Delay (s)		45.7			49.4			50.2			56.0	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM Average Control Delay			49.3			HCM Level of Service			D			
HCM Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			111.9			Sum of lost time (s)			42.0			
Intersection Capacity Utilization			60.7%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - AM Peak Hour

134: Pacific Coast Hwy & Huntington














































Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		0.95		0.95	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		3213		1681	1770	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		3213		1681	1770	1583
Volume (vph)	30	1619	10	60	1044	110	10	20	40	50	70	30
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	1619	10	60	1044	110	10	20	40	50	70	30
RTOR Reduction (vph)	0	0	4	0	0	43	0	37	0	0	0	27
Lane Group Flow (vph)	30	1619	6	60	1044	67	0	33	0	50	70	3
Turn Type	Prot		Perm	Prot		Perm	Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						6
Actuated Green, G (s)	1.9	45.6	45.6	5.1	48.8	48.8		6.9		9.0	9.0	9.0
Effective Green, g (s)	1.9	45.6	45.6	5.1	48.8	48.8		6.9		9.0	9.0	9.0
Actuated g/C Ratio	0.02	0.55	0.55	0.06	0.59	0.59		0.08		0.11	0.11	0.11
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	41	1954	874	109	2091	935		268		183	193	172
v/s Ratio Prot	0.02	c0.46		c0.03	c0.29			c0.01		0.03	c0.04	
v/s Ratio Perm			0.00			0.04						0.00
v/c Ratio	0.73	0.83	0.01	0.55	0.50	0.07		0.12		0.27	0.36	0.02
Uniform Delay, d1	40.1	15.3	8.3	37.6	9.8	7.2		35.1		33.8	34.1	32.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	49.4	3.0	0.0	5.9	0.2	0.0		0.2		0.8	1.2	0.0
Delay (s)	89.5	18.3	8.3	43.5	10.0	7.3		35.3		34.6	35.3	32.9
Level of Service	F	B	A	D	A	A		D		C	D	C
Approach Delay (s)		19.5			11.4			35.3			34.6	
Approach LOS		B			B			D			C	
Intersection Summary												
HCM Average Control Delay			17.4				HCM Level of Service			B		
HCM Volume to Capacity ratio			0.70									
Actuated Cycle Length (s)			82.6				Sum of lost time (s)		20.0			
Intersection Capacity Utilization			66.4%				ICU Level of Service		C			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - AM Peak Hour

135: Pacific Coast Hwy & Beach






















Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	  	  		  	  	  	  	  	  	  	  	  
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5072		1770	3539	1583	1770	3539	1583	3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5072		1770	3539	1583	1770	3539	1583	3433	1863	1583
Volume (vph)	131	1680	30	20	1112	310	20	50	10	500	80	192
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	131	1680	30	20	1112	310	20	50	10	500	80	192
RTOR Reduction (vph)	0	2	0	0	0	182	0	0	9	0	0	0
Lane Group Flow (vph)	131	1708	0	20	1112	128	20	50	1	500	80	192
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			Free
Actuated Green, G (s)	6.4	39.0		2.2	34.8	34.8	2.2	10.4	10.4	16.9	25.1	84.5
Effective Green, g (s)	6.4	39.0		2.2	34.8	34.8	2.2	10.4	10.4	16.9	25.1	84.5
Actuated g/C Ratio	0.08	0.46		0.03	0.41	0.41	0.03	0.12	0.12	0.20	0.30	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	260	2341		46	1457	652	46	436	195	687	553	1583
v/s Ratio Prot	c0.04	c0.34		0.01	0.31		0.01	0.01		c0.15	c0.04	
v/s Ratio Perm						0.08			0.00			0.12
v/c Ratio	0.50	0.73		0.43	0.76	0.20	0.43	0.11	0.01	0.73	0.14	0.12
Uniform Delay, d1	37.5	18.5		40.5	21.3	15.9	40.5	33.0	32.5	31.6	21.8	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	1.2		6.5	2.4	0.1	6.5	0.1	0.0	3.9	0.1	0.2
Delay (s)	39.1	19.6		47.0	23.7	16.0	47.0	33.1	32.5	35.5	21.9	0.2
Level of Service	D	B		D	C	B	D	C	C	D	C	A
Approach Delay (s)		21.0			22.4			36.5			25.3	
Approach LOS		C			C			D			C	
Intersection Summary												
HCM Average Control Delay			22.6			HCM Level of Service			C			
HCM Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			84.5			Sum of lost time (s)			8.0			
Intersection Capacity Utilization			67.4%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - AM Peak Hour

136: Pacific Coast Hwy & Newland

Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95			1.00	1.00
Frt	1.00	1.00			1.00	0.85		1.00			1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00		0.98			0.95	1.00
Satd. Flow (prot)	1770	5085			5085	1583		3453			1770	1583
Flt Permitted	0.95	1.00			1.00	1.00		0.85			0.74	1.00
Satd. Flow (perm)	1770	5085			5085	1583		3023			1385	1583
Volume (vph)	100	1860	0	0	1192	30	10	10	0	220	0	220
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	100	1860	0	0	1192	30	10	10	0	220	0	220
RTOR Reduction (vph)	0	0	0	0	0	17	0	0	0	0	0	129
Lane Group Flow (vph)	100	1860	0	0	1192	13	0	20	0	0	220	91
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	5.2	33.2			24.0	24.0		14.1			14.1	14.1
Effective Green, g (s)	5.2	33.2			24.0	24.0		14.1			14.1	14.1
Actuated g/C Ratio	0.09	0.60			0.43	0.43		0.25			0.25	0.25
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	166	3053			2207	687		771			353	404
v/s Ratio Prot	0.06	c0.37			0.23							
v/s Ratio Perm						0.01		0.01			c0.16	0.06
v/c Ratio	0.60	0.61			0.54	0.02		0.03			0.62	0.23
Uniform Delay, d1	24.1	7.0			11.6	8.9		15.4			18.2	16.3
Progression Factor	1.00	1.00			1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	6.0	0.3			0.3	0.0		0.0			3.4	0.3
Delay (s)	30.1	7.3			11.8	8.9		15.5			21.7	16.6
Level of Service	C	A			B	A		B			C	B
Approach Delay (s)		8.5			11.8			15.5			19.1	
Approach LOS		A			B			B			B	
























Intersection Summary

HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	55.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

2030 Alternative 1 With Project - AM Peak Hour

137: Pacific Coast Hwy & Magnolia
































Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.95	0.95		0.95	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1681	1681		1681	1703	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	1681	1681		1681	1703	1583
Volume (vph)	100	1970	30	20	1082	50	10	20	10	160	20	170
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	100	1970	30	20	1082	50	10	20	10	160	20	170
RTOR Reduction (vph)	0	0	14	0	0	28	0	9	0	0	0	147
Lane Group Flow (vph)	100	1970	16	20	1082	22	10	21	0	88	92	23
Turn Type	Prot		Perm	Prot		Perm	Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						6
Actuated Green, G (s)	8.0	37.6	37.6	2.2	31.8	31.8	7.1	7.1		9.6	9.6	9.6
Effective Green, g (s)	8.0	37.6	37.6	2.2	31.8	31.8	7.1	7.1		9.6	9.6	9.6
Actuated g/C Ratio	0.11	0.52	0.52	0.03	0.44	0.44	0.10	0.10		0.13	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	195	2637	821	54	2230	694	165	165		223	226	210
v/s Ratio Prot	c0.06	c0.39		0.01	0.21		0.01	c0.01		0.05	c0.05	
v/s Ratio Perm			0.01			0.01						0.01
v/c Ratio	0.51	0.75	0.02	0.37	0.49	0.03	0.06	0.13		0.39	0.41	0.11
Uniform Delay, d1	30.4	13.7	8.5	34.5	14.5	11.6	29.7	29.9		28.8	28.8	27.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.3	1.2	0.0	4.2	0.2	0.0	0.2	0.3		1.2	1.2	0.2
Delay (s)	32.7	14.9	8.5	38.7	14.7	11.6	29.8	30.2		29.9	30.0	27.9
Level of Service	C	B	A	D	B	B	C	C		C	C	C
Approach Delay (s)		15.7			15.0			30.1			29.0	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM Average Control Delay			16.9			HCM Level of Service			B			
HCM Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			72.5			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			63.0%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - AM Peak Hour

138: Pacific Coast Hwy & Brookhurst

Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 		  	 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1770	1723		3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	1770	1723		3433	1863	1583
Volume (vph)	160	2030	10	10	961	210	10	10	10	670	10	170
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	160	2030	10	10	961	210	10	10	10	670	10	170
RTOR Reduction (vph)	0	0	5	0	0	79	0	9	0	0	0	128
Lane Group Flow (vph)	160	2030	5	10	961	131	10	11	0	670	10	42
Turn Type	Prot		Perm	Prot		pm+ov	Split			Split		Perm
Protected Phases	7	4		3	8	6	2	2		6	6	
Permitted Phases			4			8						6
Actuated Green, G (s)	10.6	43.1	43.1	0.6	33.1	55.1	6.6	6.6		22.0	22.0	22.0
Effective Green, g (s)	10.6	43.1	43.1	0.6	33.1	55.1	6.6	6.6		22.0	22.0	22.0
Actuated g/C Ratio	0.12	0.49	0.49	0.01	0.37	0.62	0.07	0.07		0.25	0.25	0.25
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	212	2482	773	12	1906	988	132	129		855	464	394
v/s Ratio Prot	c0.09	c0.40		0.01	0.19	0.03	0.01	c0.01		c0.20	0.01	
v/s Ratio Perm			0.00			0.05						0.03
v/c Ratio	0.75	0.82	0.01	0.83	0.50	0.13	0.08	0.08		0.78	0.02	0.11
Uniform Delay, d1	37.6	19.3	11.6	43.8	21.3	6.8	38.0	38.0		30.9	25.0	25.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	14.1	2.2	0.0	168.3	0.2	0.1	0.2	0.3		4.7	0.0	0.1
Delay (s)	51.7	21.5	11.6	212.1	21.5	6.9	38.3	38.3		35.7	25.0	25.7
Level of Service	D	C	B	F	C	A	D	D		D	C	C
Approach Delay (s)		23.6			20.5			38.3			33.6	
Approach LOS		C			C			D			C	
Intersection Summary												
HCM Average Control Delay			24.8			HCM Level of Service				C		
HCM Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			88.3			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			78.3%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

ALL-WAY STOP CONTROL ANALYSIS

General Information				Site Information	
Analyst	SA			Intersection	Lake Street/6th Street
Agency/Co.				Jurisdiction	
Date Performed	3/31/2009			Analysis Year	2030 Base Case+Project+Alt 1
Analysis Time Period	AM Peak				

Project ID					
East/West Street: 6th Street			North/South Street: Lake Street		

Volume Adjustments and Site Characteristics

Approach		Eastbound			Westbound		
Movement		L	T	R	L	T	R
Volume (veh/h)		67	30	104	0	90	30
%Thrus Left Lane							
Approach		Northbound			Southbound		
Movement		L	T	R	L	T	R
Volume (veh/h)		22	47	0	60	118	70
%Thrus Left Lane							

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	1.00		1.00		1.00		1.00	
Flow Rate (veh/h)	201		120		69		248	
% Heavy Vehicles	0		0		0		0	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.3		0.0		0.3		0.2	
Prop. Right-Turns	0.5		0.3		0.0		0.3	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.2		-0.2		0.1		-0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.18		0.11		0.06		0.22	
hd, final value (s)	4.61		4.81		5.08		4.66	
x, final value	0.26		0.16		0.10		0.32	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t _s (s)	2.6		2.8		3.1		2.7	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	451		370		319		498	
Delay (s/veh)	9.20		8.72		8.63		9.85	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.20		8.72		8.63		9.85	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.30							
Intersection LOS	A							

ALL-WAY STOP CONTROL ANALYSIS

General Information				Site Information	
Analyst	SA			Intersection	Lake Street/Orange Avenue
Agency/Co.				Jurisdiction	
Date Performed	3/31/2009			Analysis Year	2030 Base Case+Project+Alt 1
Analysis Time Period	AM Peak				

Project ID					
East/West Street:	Orange Avenue			North/South Street:	Lake Street

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	60	330	92	39	315	53
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	110	46	18	21	150	41
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	1.00		1.00		1.00		1.00	
Flow Rate (veh/h)	482		407		174		212	
% Heavy Vehicles	0		0		0		0	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.1		0.1		0.6		0.1	
Prop. Right-Turns	0.2		0.1		0.1		0.2	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		-0.1		0.1		-0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.43		0.36		0.15		0.19	
hd, final value (s)	6.17		6.35		7.45		7.16	
x, final value	0.83		0.72		0.36		0.42	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t _s (s)	4.2		4.3		5.5		5.2	
























Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	568		541		417		441	
Delay (s/veh)	31.96		23.85		14.59		15.27	
LOS	D		C		B		C	
Approach: Delay (s/veh)	31.96		23.85		14.59		15.27	
LOS	D		C		B		C	
Intersection Delay (s/veh)	24.23							
Intersection LOS	C							

2030 Alternative 1 With Project - AM Peak Hour

108: Atlanta & Beach












Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Fr't	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	4957		1770	4895	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	4957		1770	4895	
Volume (vph)	104	303	50	65	504	180	20	426	86	190	647	215
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	104	303	50	65	504	180	20	426	86	190	647	215
RTOR Reduction (vph)	0	0	35	0	0	134	0	24	0	0	48	0
Lane Group Flow (vph)	104	303	15	65	504	46	20	488	0	190	814	0
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	7.2	19.1	19.1	4.6	16.5	16.5	1.1	15.6		9.7	24.2	
Effective Green, g (s)	7.2	19.1	19.1	4.6	16.5	16.5	1.1	15.6		9.7	24.2	
Actuated g/C Ratio	0.11	0.29	0.29	0.07	0.25	0.25	0.02	0.24		0.15	0.37	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1040	465	125	898	402	30	1190		264	1822	
v/s Ratio Prot	c0.06	c0.09		0.04	c0.14		0.01	0.10		c0.11	c0.17	
v/s Ratio Perm			0.01			0.03						
v/c Ratio	0.53	0.29	0.03	0.52	0.56	0.11	0.67	0.41		0.72	0.45	
Uniform Delay, d1	27.3	17.7	16.4	29.1	21.1	18.6	31.8	20.8		26.4	15.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.7	0.2	0.0	3.9	0.8	0.1	44.1	0.2		9.0	0.2	
Delay (s)	30.1	17.9	16.4	33.0	21.9	18.8	75.9	21.1		35.4	15.5	
Level of Service	C	B	B	C	C	B	E	C		D	B	
Approach Delay (s)		20.5			22.1			23.1			19.1	
Approach LOS		C			C			C			B	
Intersection Summary												
HCM Average Control Delay			20.9			HCM Level of Service			C			
HCM Volume to Capacity ratio			0.56									
Actuated Cycle Length (s)			65.0			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			53.7%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - AM Peak Hour

163: Pacific View & Beach























Synchro 6 Report

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1770	5085	4955	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1770	1583	1770	5085	4955	
Volume (vph)	50	42	70	388	729	150
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	50	42	70	388	729	150
RTOR Reduction (vph)	0	38	0	0	16	0
Lane Group Flow (vph)	50	4	70	388	863	0
Turn Type		Perm	Prot			
Protected Phases	4		5	2	6	
Permitted Phases		4				
Actuated Green, G (s)	6.4	6.4	4.5	45.5	37.0	
Effective Green, g (s)	6.4	6.4	4.5	45.5	37.0	
Actuated g/C Ratio	0.11	0.11	0.08	0.76	0.62	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	189	169	133	3863	3061	
v/s Ratio Prot	c0.03		c0.04	0.08	c0.17	
v/s Ratio Perm		0.00				
v/c Ratio	0.26	0.03	0.53	0.10	0.28	
Uniform Delay, d1	24.6	24.0	26.7	1.9	5.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	0.1	3.7	0.0	0.1	
Delay (s)	25.3	24.0	30.4	1.9	5.4	
Level of Service	C	C	C	A	A	
Approach Delay (s)	24.7			6.2	5.4	
Approach LOS	C			A	A	
Intersection Summary						
HCM Average Control Delay			6.9	HCM Level of Service		A
HCM Volume to Capacity ratio			0.30			
Actuated Cycle Length (s)			59.9	Sum of lost time (s)		12.0
Intersection Capacity Utilization			34.6%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - PM Peak Hour

39: Pacific Coast Hwy & Warner

Synchro 6 Report

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3527		1770	3539	1583	1770	1788		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	3527		1770	3539	1583	1770	1788		3433	1863	2787
Volume (vph)	410	1284	30	20	1616	339	30	110	40	359	70	830
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	410	1284	30	20	1616	339	30	110	40	359	70	830
RTOR Reduction (vph)	0	1	0	0	0	81	0	11	0	0	0	262
Lane Group Flow (vph)	410	1313	0	20	1616	258	30	139	0	359	70	568
Turn Type	Prot			Prot		Perm	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	15.1	70.5		1.9	57.3	57.3	2.3	16.3		14.4	28.4	28.4
Effective Green, g (s)	15.1	70.5		1.9	57.3	57.3	2.3	16.3		14.4	28.4	28.4
Actuated g/C Ratio	0.13	0.59		0.02	0.48	0.48	0.02	0.14		0.12	0.24	0.24
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	435	2088		28	1703	762	34	245		415	444	665
v/s Ratio Prot	c0.12	0.37		0.01	c0.46		0.02	0.08		c0.10	0.04	
v/s Ratio Perm						0.16						c0.20
v/c Ratio	0.94	0.63		0.71	0.95	0.34	0.88	0.57		0.87	0.16	0.85
Uniform Delay, d1	51.6	15.8		58.3	29.5	19.1	58.3	48.1		51.4	35.9	43.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	28.9	0.6		60.5	11.7	0.3	106.5	3.0		16.9	0.2	10.4
Delay (s)	80.5	16.4		118.9	41.2	19.4	164.8	51.1		68.3	36.1	53.8
Level of Service	F	B		F	D	B	F	D		E	D	D
Approach Delay (s)		31.6			38.3			70.0			56.9	
Approach LOS		C			D			E			E	












Intersection Summary

HCM Average Control Delay	41.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	119.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

2030 Alternative 1 With Project - PM Peak Hour

125: Pacific Coast Hwy & Seapoint













Synchro 6 Report

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		0.97	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3510		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	3539	3510		3433	1583
Volume (vph)	340	1433	1555	89	59	410
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	340	1433	1555	89	59	410
RTOR Reduction (vph)	0	0	3	0	0	12
Lane Group Flow (vph)	340	1433	1641	0	59	398
Turn Type	Prot				pm+ov	
Protected Phases	7	4	8		6	7
Permitted Phases						6
Actuated Green, G (s)	21.8	74.8	49.0		7.4	29.2
Effective Green, g (s)	21.8	74.8	49.0		7.4	29.2
Actuated g/C Ratio	0.24	0.83	0.54		0.08	0.32
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	428	2935	1907		282	583
v/s Ratio Prot	c0.19	0.40	c0.47		0.02	c0.16
v/s Ratio Perm						0.09
v/c Ratio	0.79	0.49	0.86		0.21	0.68
Uniform Delay, d1	32.1	2.2	17.7		38.7	26.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	9.8	0.1	4.2		0.4	3.3
Delay (s)	41.9	2.3	21.9		39.0	29.8
Level of Service	D	A	C		D	C
Approach Delay (s)		9.9	21.9		30.9	
Approach LOS		A	C		C	
Intersection Summary						
HCM Average Control Delay			17.5		HCM Level of Service	B
HCM Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			90.2		Sum of lost time (s)	12.0
Intersection Capacity Utilization			78.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - PM Peak Hour

126: Pacific Coast Hwy & Goldenwest













Synchro 6 Report

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	1770	1583
Volume (vph)	550	1461	1494	262	252	490
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	550	1461	1494	262	252	490
RTOR Reduction (vph)	0	0	0	110	0	398
Lane Group Flow (vph)	550	1461	1494	152	252	92
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	38.0	93.0	51.0	51.0	18.6	18.6
Effective Green, g (s)	38.0	93.0	51.0	51.0	18.6	18.6
Actuated g/C Ratio	0.32	0.78	0.43	0.43	0.16	0.16
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	562	2752	1509	675	275	246
v/s Ratio Prot	c0.31	0.41	c0.42		c0.14	
v/s Ratio Perm				0.10		0.06
v/c Ratio	0.98	0.53	0.99	0.23	0.92	0.37
Uniform Delay, d1	40.4	5.0	34.0	21.8	49.7	45.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	32.2	0.2	20.7	0.2	32.8	1.0
Delay (s)	72.6	5.2	54.8	21.9	82.5	46.2
Level of Service	E	A	D	C	F	D
Approach Delay (s)		23.6	49.9		58.6	
Approach LOS		C	D		E	
Intersection Summary						
HCM Average Control Delay			39.6		HCM Level of Service	D
HCM Volume to Capacity ratio			0.97			
Actuated Cycle Length (s)			119.6		Sum of lost time (s)	12.0
Intersection Capacity Utilization			95.7%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - PM Peak Hour

127: Pacific Coast Hwy & 17th St













Synchro 6 Report

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	1770	1583
Volume (vph)	330	1403	1736	60	110	100
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	330	1403	1736	60	110	100
RTOR Reduction (vph)	0	0	0	21	0	89
Lane Group Flow (vph)	330	1403	1736	39	110	11
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	22.2	80.9	54.7	54.7	11.5	11.5
Effective Green, g (s)	22.2	80.9	54.7	54.7	11.5	11.5
Actuated g/C Ratio	0.22	0.81	0.54	0.54	0.11	0.11
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	391	2852	1928	862	203	181
v/s Ratio Prot	c0.19	0.40	c0.49		c0.06	
v/s Ratio Perm				0.02		0.01
v/c Ratio	0.84	0.49	0.90	0.05	0.54	0.06
Uniform Delay, d1	37.4	3.1	20.4	10.7	42.0	39.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.2	0.1	6.2	0.0	2.9	0.1
Delay (s)	52.7	3.3	26.6	10.7	44.9	39.8
Level of Service	D	A	C	B	D	D
Approach Delay (s)		12.7	26.1		42.5	
Approach LOS		B	C		D	
Intersection Summary						
HCM Average Control Delay			20.8		HCM Level of Service	C
HCM Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			100.4		Sum of lost time (s)	12.0
Intersection Capacity Utilization			82.4%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - PM Peak Hour

165: Pacific Coast Hwy & 9th St




















Synchro 6 Report

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Fr _t	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	1770	1583
Volume (vph)	20	1542	1859	30	50	20
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	1542	1859	30	50	20
RTOR Reduction (vph)	0	0	0	11	0	17
Lane Group Flow (vph)	20	1542	1859	19	50	3
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	2.0	47.2	41.2	41.2	8.3	8.3
Effective Green, g (s)	2.0	47.2	41.2	41.2	8.3	8.3
Actuated g/C Ratio	0.03	0.74	0.65	0.65	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	56	2631	2296	1027	231	207
v/s Ratio Prot	0.01	c0.44	c0.53		c0.03	
v/s Ratio Perm				0.01		0.00
v/c Ratio	0.36	0.59	0.81	0.02	0.22	0.01
Uniform Delay, d ₁	30.1	3.7	8.2	4.0	24.7	24.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d ₂	3.9	0.3	2.2	0.0	0.5	0.0
Delay (s)	34.0	4.0	10.5	4.0	25.2	24.1
Level of Service	C	A	B	A	C	C
Approach Delay (s)		4.4	10.4		24.8	
Approach LOS		A	B		C	
Intersection Summary						
HCM Average Control Delay			8.0		HCM Level of Service	A
HCM Volume to Capacity ratio			0.72			
Actuated Cycle Length (s)			63.5		Sum of lost time (s)	12.0
Intersection Capacity Utilization			61.4%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

2030 Alternative 1 With Project - PM Peak Hour

129: Pacific Coast Hwy & 6th St















Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5068		1770	5035			1701		1770	1621	
Flt Permitted	0.95	1.00		0.95	1.00			0.40		0.51	1.00	
Satd. Flow (perm)	1770	5068		1770	5035			683		954	1621	
Volume (vph)	326	1277	30	40	1661	117	40	20	70	107	30	191
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	326	1277	30	40	1661	117	40	20	70	107	30	191
RTOR Reduction (vph)	0	2	0	0	7	0	0	35	0	0	165	0
Lane Group Flow (vph)	326	1305	0	40	1771	0	0	95	0	107	56	0
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)	21.0	56.3		5.5	40.8			16.2		16.2	16.2	
Effective Green, g (s)	21.0	56.3		5.5	40.8			16.2		16.2	16.2	
Actuated g/C Ratio	0.18	0.47		0.05	0.34			0.13		0.13	0.13	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	310	2378		81	1712			92		129	219	
v/s Ratio Prot	c0.18	0.26		0.02	c0.35						0.03	
v/s Ratio Perm								c0.14		0.11		
v/c Ratio	1.05	0.55		0.49	1.03			1.03		0.83	0.25	
Uniform Delay, d1	49.5	22.8		55.9	39.6			51.9		50.6	46.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	65.3	0.3		4.7	31.3			101.5		33.6	0.6	
Delay (s)	114.8	23.0		60.6	70.9			153.4		84.2	47.1	
Level of Service	F	C		E	E			F		F	D	
Approach Delay (s)		41.4			70.6			153.4			59.2	
Approach LOS		D			E			F			E	
Intersection Summary												
HCM Average Control Delay			60.2			HCM Level of Service				E		
HCM Volume to Capacity ratio			1.04									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			42.0			
Intersection Capacity Utilization			87.0%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - PM Peak Hour

130: Pacific Coast Hwy & Main























Synchro 6 Report

							
Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0			
Lane Util. Factor		0.91	1.00	0.91			
Frt		1.00	1.00	1.00			
Flt Protected		1.00	0.95	1.00			
Satd. Flow (prot)		5085	1770	5085			
Flt Permitted		1.00	0.95	1.00			
Satd. Flow (perm)		5085	1770	5085			
Volume (vph)	0	1283	40	1623	0	0	0
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1283	40	1623	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1283	40	1623	0	0	0
Turn Type	Prot		Prot		Perm		Perm
Protected Phases	7	4	3	8		6	
Permitted Phases					8		6
Actuated Green, G (s)		29.8	4.7	38.5			
Effective Green, g (s)		29.8	4.7	38.5			
Actuated g/C Ratio		0.36	0.06	0.47			
Clearance Time (s)		4.0	4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0			
Lane Grp Cap (vph)		1837	101	2373			
v/s Ratio Prot		0.25	0.02	c0.32			
v/s Ratio Perm							
v/c Ratio		0.70	0.40	0.68			
Uniform Delay, d1		22.5	37.5	17.2			
Progression Factor		1.00	1.00	1.00			
Incremental Delay, d2		1.2	2.5	0.8			
Delay (s)		23.7	40.1	18.1			
Level of Service		C	D	B			
Approach Delay (s)		23.7		18.6		0.0	
Approach LOS		C		B		A	
Intersection Summary							
HCM Average Control Delay			20.8		HCM Level of Service		C
HCM Volume to Capacity ratio			0.68				
Actuated Cycle Length (s)			82.5		Sum of lost time (s)		44.0
Intersection Capacity Utilization			36.6%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

2030 Alternative 1 With Project - PM Peak Hour

133: Pacific Coast Hwy & 1st St

Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.95	1.00	0.95	0.95	0.88
Flt	1.00	1.00		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1770	5072		1770	4918		1681	1745	1583	1681	1702	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.96	1.00
Satd. Flow (perm)	1770	5072		1770	4918		1681	1745	1583	1681	1702	2787
Volume (vph)	376	1123	20	60	1629	458	70	40	70	248	30	277
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	376	1123	20	60	1629	458	70	40	70	248	30	277
RTOR Reduction (vph)	0	1	0	0	41	0	0	0	64	0	0	244
Lane Group Flow (vph)	376	1142	0	60	2046	0	54	56	6	135	143	33
Turn Type	Prot			Prot			Split		Perm	Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	12.0	37.2		4.7	29.9		8.9	8.9	8.9	13.3	13.3	13.3
Effective Green, g (s)	12.0	37.2		4.7	29.9		8.9	8.9	8.9	13.3	13.3	13.3
Actuated g/C Ratio	0.11	0.34		0.04	0.27		0.08	0.08	0.08	0.12	0.12	0.12
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	193	1712		75	1334		136	141	128	203	205	336
v/s Ratio Prot	c0.21	0.23		0.03	c0.42		c0.03	0.03		0.08	c0.08	
v/s Ratio Perm									0.00			0.01
v/c Ratio	1.95	0.67		0.80	1.53		0.40	0.40	0.04	0.67	0.70	0.10
Uniform Delay, d1	49.1	31.2		52.3	40.2		48.1	48.1	46.7	46.3	46.5	43.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	445.1	1.0		43.9	244.1		1.9	1.8	0.1	8.0	9.9	0.1
Delay (s)	494.2	32.2		96.2	284.2		50.0	49.9	46.9	54.3	56.4	43.3
Level of Service	F	C		F	F		D	D	D	D	E	D
Approach Delay (s)		146.5			279.0			48.8			49.3	
Approach LOS		F			F			D			D	























Intersection Summary

HCM Average Control Delay	194.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	110.2	Sum of lost time (s)	46.1
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

2030 Alternative 1 With Project - PM Peak Hour

134: Pacific Coast Hwy & Huntington
























Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		0.95		0.95	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		3253		1681	1770	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		3253		1681	1770	1583
Volume (vph)	60	1350	10	40	1833	80	40	60	90	30	40	50
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	60	1350	10	40	1833	80	40	60	90	30	40	50
RTOR Reduction (vph)	0	0	4	0	0	17	0	82	0	0	0	46
Lane Group Flow (vph)	60	1350	6	40	1833	63	0	108	0	30	40	4
Turn Type	Prot		Perm	Prot		Perm	Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						6
Actuated Green, G (s)	3.7	55.2	55.2	3.6	55.1	55.1		8.6		7.9	7.9	7.9
Effective Green, g (s)	3.7	55.2	55.2	3.6	55.1	55.1		8.6		7.9	7.9	7.9
Actuated g/C Ratio	0.04	0.60	0.60	0.04	0.60	0.60		0.09		0.09	0.09	0.09
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	72	2140	957	70	2136	955		306		145	153	137
v/s Ratio Prot	c0.03	0.38		0.02	c0.52			c0.03		0.02	c0.02	
v/s Ratio Perm			0.00			0.04						0.00
v/c Ratio	0.83	0.63	0.01	0.57	0.86	0.07		0.35		0.21	0.26	0.03
Uniform Delay, d1	43.5	11.5	7.2	43.1	14.9	7.5		38.7		38.8	39.0	38.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	53.2	0.6	0.0	10.8	3.7	0.0		0.7		0.7	0.9	0.1
Delay (s)	96.7	12.2	7.2	53.9	18.5	7.5		39.5		39.5	39.9	38.3
Level of Service	F	B	A	D	B	A		D		D	D	D
Approach Delay (s)		15.7			18.8			39.5			39.1	
Approach LOS		B			B			D			D	
Intersection Summary												
HCM Average Control Delay			19.3			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			91.3			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			69.7%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - PM Peak Hour

135: Pacific Coast Hwy & Beach





























Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	3539	1583	1770	3539	1583	3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	3539	1583	1770	3539	1583	3433	1863	1583
Volume (vph)	235	1303	30	40	1598	860	20	50	30	340	50	144
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	235	1303	30	40	1598	860	20	50	30	340	50	144
RTOR Reduction (vph)	0	2	0	0	0	321	0	0	27	0	0	0
Lane Group Flow (vph)	235	1331	0	40	1598	539	20	50	3	340	50	144
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			Free
Actuated Green, G (s)	10.4	63.1		3.9	56.6	56.6	1.8	9.5	9.5	13.7	21.4	106.2
Effective Green, g (s)	10.4	63.1		3.9	56.6	56.6	1.8	9.5	9.5	13.7	21.4	106.2
Actuated g/C Ratio	0.10	0.59		0.04	0.53	0.53	0.02	0.09	0.09	0.13	0.20	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	336	3011		65	1886	844	30	317	142	443	375	1583
v/s Ratio Prot	c0.07	0.26		0.02	c0.45		0.01	0.01		c0.10	c0.03	
v/s Ratio Perm						0.34			0.00			0.09
v/c Ratio	0.70	0.44		0.62	0.85	0.64	0.67	0.16	0.02	0.77	0.13	0.09
Uniform Delay, d1	46.4	11.9		50.4	21.1	17.6	51.9	44.7	44.1	44.7	34.8	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.1		16.1	3.7	1.6	44.1	0.2	0.1	7.8	0.2	0.1
Delay (s)	52.6	12.0		66.5	24.9	19.2	96.0	44.9	44.2	52.5	35.0	0.1
Level of Service	D	B		E	C	B	F	D	D	D	C	A
Approach Delay (s)		18.1			23.6			54.9			36.7	
Approach LOS		B			C			D			D	
Intersection Summary												
HCM Average Control Delay			23.9			HCM Level of Service			C			
HCM Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			106.2			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			77.2%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - PM Peak Hour

136: Pacific Coast Hwy & Newland






























Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			  			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91	1.00		0.91	1.00		0.95			1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85		0.92			1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00		0.98			0.95	1.00
Satd. Flow (prot)	1770	5085	1583		5085	1583		3194			1770	1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00		0.85			0.74	1.00
Satd. Flow (perm)	1770	5085	1583		5085	1583		2790			1385	1583
Volume (vph)	210	1413	10	0	2309	320	10	0	10	110	0	210
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	210	1413	10	0	2309	320	10	0	10	110	0	210
RTOR Reduction (vph)	0	0	2	0	0	136	0	9	0	0	0	182
Lane Group Flow (vph)	210	1413	8	0	2309	184	0	11	0	0	110	28
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	16.0	75.1	75.1		55.1	55.1		12.7			12.7	12.7
Effective Green, g (s)	16.0	75.1	75.1		55.1	55.1		12.7			12.7	12.7
Actuated g/C Ratio	0.17	0.78	0.78		0.58	0.58		0.13			0.13	0.13
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	296	3986	1241		2925	910		370			184	210
v/s Ratio Prot	c0.12	0.28			c0.45							
v/s Ratio Perm			0.00			0.12		0.00			c0.08	0.02
v/c Ratio	0.71	0.35	0.01		0.79	0.20		0.03			0.60	0.13
Uniform Delay, d1	37.7	3.1	2.2		15.8	9.8		36.2			39.1	36.7
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	7.6	0.1	0.0		1.5	0.1		0.0			5.1	0.3
Delay (s)	45.3	3.2	2.2		17.3	9.9		36.2			44.3	37.0
Level of Service	D	A	A		B	A		D			D	D
Approach Delay (s)		8.6			16.4			36.2			39.5	
Approach LOS		A			B			D			D	
Intersection Summary												
HCM Average Control Delay			15.3			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			95.8			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			79.0%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

2030 Alternative 1 With Project - PM Peak Hour

137: Pacific Coast Hwy & Magnolia

Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.95	0.95		0.95	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1681	1703		1681	1722	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	1681	1703		1681	1722	1583
Volume (vph)	150	1314	30	30	2659	190	20	30	10	100	30	100
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	150	1314	30	30	2659	190	20	30	10	100	30	100
RTOR Reduction (vph)	0	0	10	0	0	68	0	9	0	0	0	91
Lane Group Flow (vph)	150	1314	20	30	2659	122	20	31	0	63	67	9
Turn Type	Prot		Perm	Prot		Perm	Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						6
Actuated Green, G (s)	10.0	69.3	69.3	3.5	62.8	62.8	7.4	7.4		9.4	9.4	9.4
Effective Green, g (s)	10.0	69.3	69.3	3.5	62.8	62.8	7.4	7.4		9.4	9.4	9.4
Actuated g/C Ratio	0.09	0.66	0.66	0.03	0.59	0.59	0.07	0.07		0.09	0.09	0.09
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	168	3337	1039	59	3024	941	118	119		150	153	141
v/s Ratio Prot	c0.08	0.26		0.02	c0.52		0.01	c0.02		0.04	c0.04	
v/s Ratio Perm			0.01			0.08						0.01
v/c Ratio	0.89	0.39	0.02	0.51	0.88	0.13	0.17	0.26		0.42	0.44	0.06
Uniform Delay, d1	47.3	8.4	6.3	50.2	18.2	9.4	46.2	46.5		45.5	45.6	44.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	40.1	0.1	0.0	6.7	3.2	0.1	0.7	1.2		1.9	2.0	0.2
Delay (s)	87.4	8.5	6.3	56.9	21.4	9.5	46.9	47.7		47.4	47.6	44.3
Level of Service	F	A	A	E	C	A	D	D		D	D	D
Approach Delay (s)		16.4			21.0			47.4			46.1	
Approach LOS		B			C			D			D	
























Intersection Summary

HCM Average Control Delay	21.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	105.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

2030 Alternative 1 With Project - PM Peak Hour

138: Pacific Coast Hwy & Brookhurst

Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1770	1743		3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	1770	1743		3433	1863	1583
Volume (vph)	220	1504	10	20	2209	550	20	40	30	280	30	160
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	220	1504	10	20	2209	550	20	40	30	280	30	160
RTOR Reduction (vph)	0	0	4	0	0	183	0	24	0	0	0	140
Lane Group Flow (vph)	220	1504	6	20	2209	367	20	46	0	280	30	20
Turn Type	Prot		Perm	Prot		pm+ov	Split			Split		Perm
Protected Phases	7	4		3	8	6	2	2		6	6	
Permitted Phases			4			8						6
Actuated Green, G (s)	15.9	68.5	68.5	1.9	54.5	68.4	8.4	8.4		13.9	13.9	13.9
Effective Green, g (s)	15.9	68.5	68.5	1.9	54.5	68.4	8.4	8.4		13.9	13.9	13.9
Actuated g/C Ratio	0.15	0.63	0.63	0.02	0.50	0.63	0.08	0.08		0.13	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	259	3204	998	31	2550	996	137	135		439	238	202
v/s Ratio Prot	c0.12	0.30		0.01	c0.43	0.05	0.01	c0.03		c0.08	0.02	
v/s Ratio Perm			0.00			0.18						0.01
v/c Ratio	0.85	0.47	0.01	0.65	0.87	0.37	0.15	0.34		0.64	0.13	0.10
Uniform Delay, d1	45.2	10.6	7.5	53.1	23.9	9.7	46.8	47.5		45.0	42.0	41.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	22.0	0.1	0.0	37.9	3.4	0.2	0.5	1.5		3.0	0.2	0.2
Delay (s)	67.2	10.7	7.5	91.0	27.2	10.0	47.3	49.0		48.0	42.3	42.1
Level of Service	E	B	A	F	C	A	D	D		D	D	D
Approach Delay (s)		17.8			24.3			48.6			45.7	
Approach LOS		B			C			D			D	
Intersection Summary												
HCM Average Control Delay			24.5			HCM Level of Service				C		
HCM Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			108.7			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			79.5%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

ALL-WAY STOP CONTROL ANALYSIS

General Information				Site Information	
Analyst	SA			Intersection	Lake Street/6th Street
Agency/Co.				Jurisdiction	
Date Performed	3/31/2009			Analysis Year	2030 Base Case+Project+Alt 1
Analysis Time Period	PM Peak				

Project ID					
East/West Street: 6th Street			North/South Street: Lake Street		

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	49	60	91	10	80	30
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	44	290	30	40	243	125
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	1.00		1.00		1.00		1.00	
Flow Rate (veh/h)	200		120		364		408	
% Heavy Vehicles	0		0		0		0	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.2		0.1		0.1		0.1	
Prop. Right-Turns	0.5		0.3		0.1		0.3	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.2		-0.1		-0.0		-0.2	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.18		0.11		0.32		0.36	
hd, final value (s)	6.08		6.39		5.59		5.40	
x, final value	0.34		0.21		0.57		0.61	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t _s (s)	4.1		4.4		3.6		3.4	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	450		370		612		638	
Delay (s/veh)	12.16		11.11		15.62		16.54	
LOS	B		B		C		C	
Approach: Delay (s/veh)	12.16		11.11		15.62		16.54	
LOS	B		B		C		C	
Intersection Delay (s/veh)	14.83							
Intersection LOS	B							

ALL-WAY STOP CONTROL ANALYSIS

General Information				Site Information	
Analyst	SA			Intersection	Lake Street/Orange Avenue
Agency/Co.				Jurisdiction	
Date Performed	3/31/2009			Analysis Year	2030 Base Case+Project+Alt 1
Analysis Time Period	PM Peak				

Project ID					
East/West Street:	Orange Avenue			North/South Street:	Lake Street

Volume Adjustments and Site Characteristics

Approach		Eastbound			Westbound		
Movement		L	T	R	L	T	R
Volume (veh/h)		45	377	144	143	382	153
%Thrus Left Lane							

Approach		Northbound			Southbound		
Movement		L	T	R	L	T	R
Volume (veh/h)		238	125	164	44	253	84
%Thrus Left Lane							

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	1.00		1.00		1.00		1.00	
Flow Rate (veh/h)	566		678		527		381	
% Heavy Vehicles	0		0		0		0	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.1		0.2		0.5		0.1	
Prop. Right-Turns	0.3		0.2		0.3		0.2	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		-0.1		-0.1		-0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.50		0.60		0.47		0.34	
hd, final value (s)	9.67		9.72		9.71		9.70	
x, final value	1.52		1.83		1.42		1.03	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t _s (s)	7.7		7.7		7.7		7.7	
























Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	566		678		527		381	
Delay (s/veh)	272.29		406.43		230.98		85.85	
LOS	F		F		F		F	
Approach: Delay (s/veh)	272.29		406.43		230.98		85.85	
LOS	F		F		F		F	
Intersection Delay (s/veh)	271.43							
Intersection LOS	F							

2030 Alternative 1 With Project - PM Peak Hour

108: Atlanta & Beach

Synchro 6 Report

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	4997		1770	4945	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	4997		1770	4945	
Volume (vph)	224	599	30	78	547	220	100	907	118	300	547	123
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	224	599	30	78	547	220	100	907	118	300	547	123
RTOR Reduction (vph)	0	0	21	0	0	175	0	14	0	0	30	0
Lane Group Flow (vph)	224	599	9	78	547	45	100	1011	0	300	640	0
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	16.5	30.1	30.1	7.3	20.9	20.9	8.4	26.9		20.8	39.3	
Effective Green, g (s)	16.5	30.1	30.1	7.3	20.9	20.9	8.4	26.9		20.8	39.3	
Actuated g/C Ratio	0.16	0.30	0.30	0.07	0.21	0.21	0.08	0.27		0.21	0.39	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	289	1054	471	128	732	327	147	1330		364	1922	
v/s Ratio Prot	c0.13	0.17		0.04	c0.15		0.06	c0.20		c0.17	0.13	
v/s Ratio Perm			0.01			0.03						
v/c Ratio	0.78	0.57	0.02	0.61	0.75	0.14	0.68	0.76		0.82	0.33	
Uniform Delay, d1	40.5	30.0	25.1	45.5	37.6	32.8	45.0	34.1		38.4	21.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	12.2	0.7	0.0	8.0	4.2	0.2	12.2	2.6		14.0	0.1	
Delay (s)	52.7	30.7	25.1	53.5	41.8	32.9	57.2	36.7		52.4	21.8	
Level of Service	D	C	C	D	D	C	E	D		D	C	
Approach Delay (s)		36.3			40.6			38.6			31.3	
Approach LOS		D			D			D			C	
Intersection Summary												
HCM Average Control Delay			36.6			HCM Level of Service				D		
HCM Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			101.1			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			77.6%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												